

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A portable electronic device, comprising:
a first contact surface ~~arranged to be brought into contacting with a head~~ first skin surface of an individual during usage of the device;
a second contact surface ~~arranged to contacting~~ a second skin surface on a part of a body ~~hand~~ of the individual below a shoulder line of the individual, wherein the first contact surface comprises a first electrode and the second contact surface comprises a second electrode, said first electrode being electrically isolated from said second electrode; and
a measuring component for measuring an electrical differential signal in an ECG spectrum generated by cardiac activity from said first electrode and said second electrode during the usage of said device, said electrical differential signal being representative of a physiological condition of said individual.
2. (Currently amended) The device according to claim 1, wherein said device further comprises a sensor signal interpretation unit arranged to perform an analysis of said electrical differential signal in order to derive a health-related parameter related to the cardiac activity.
3. (Previously presented) The device according to claim 2, wherein said device further comprises a user interface connectable to said sensor signal interpretation unit, said user interface being arranged to present said health-related parameter to the individual.
4. (Previously presented) The device according to claim 3, wherein said device further comprises a transmission component arranged to forward said health-related parameter to a remotely arranged unit.

5. (Cancelled)
6. (Currently amended) The device according to claim ~~[[5]]~~4, wherein said device is an electric shaver, the first contact surface comprising a front surface of a shaving head, the second contact surface comprising a grip portion of the shaver.
7. (Currently amended) The device according to claim ~~[[5]]~~4, wherein said device is an electric shaver comprising a plurality of shaving heads, the first contact surface comprising a first electrode, the second contact surface comprising a second electrode, the electrical shaver further comprising a grip portion, said portion being arranged to comprise a further electrode conceived to provide a reference signal.
8. (Currently amended) The device according to claim ~~[[5]]~~4, wherein said device is an electric toothbrush, the first contact surface comprising a brush head, the second contact surface comprising a grip portion of the toothbrush.
9. (Currently amended) The device according to claim ~~[[5]]~~4, wherein said device is a telephone handset, the first contact surface comprising a housing area of the telephone handset, said area being arranged in a direct vicinity of an earpiece, the second contact surface comprising a grip portion of the telephone handset.
10. (Previously presented) The device according to claim 9, wherein said telephone handset is a mobile telephone handset, the first contact surface comprising a keypad, the second contact surface comprising a grip portion of the mobile telephone handset.
11. (Currently amended) The device according to claim ~~[[5]]~~4, wherein said device comprises an earphone and a body unit, the first contact surface being arranged on the earphone, the second contact surface being arranged on the body unit.

12. (Currently amended) A health management system arranged to monitor a physiological condition of an individual, said system comprising:

a portable electronic device arranged to detect and measure an electrical differential signal in an ECG spectrum generated by cardiac activity representative of said condition;
a sensor signal interpretation unit arranged to analyze said electrical differential signal in order to derive a health-related parameter related to the cardiac activity;

a transmission component arranged to be actuated by said sensor signal interpretation unit ~~analysis means~~, said transmission means being arranged to forward said parameter to a remotely arranged medical care provider, said provider being arranged to process said parameter in order to derive a health condition of said individual; wherein

said device comprising a first contact surface ~~arranged to be brought into contacting with~~ a head first skin surface of an individual during usage of the device and a second contact surface ~~arranged to contacting a second skin surface of a hand on a part of a body~~ of the individual, wherein the first contact surface comprises a first electrode and the second contact surface comprises a second electrode, said first electrode being electrically isolated from said second electrode; the device further comprising a measuring component for measuring ~~an the~~ electrical differential signal from said first electrode and said second electrode during the usage of said device, ~~said electrical signal being representative of a the physiological condition of said individual.~~

13. (Previously presented) The health management system according to claim 12, wherein the transmission component is arranged for transmitting said parameter by means of a wireless signal to a base unit arranged to enable a connection to the medical care provider by means of a communication network.

14. (Previously presented) The health management system according to claim 12, wherein the device further comprises a user interface arranged to be actuated by the sensor signal interpretation unit, said user interface being arranged to present said parameter to the individual.

15. (Cancelled)

16. (Previously presented) The health management system according to claim 12, wherein said device is an electric shaver, the first contact surface comprising a front surface of a shaving head, the second contact surface comprising a grip portion of the shaver.

17. (Previously presented) The health management system according to claim 12, wherein said device is an electric shaver comprising a plurality of shaving heads, the first contact surface comprising a first electrode, the second contact surface comprising a second electrode, the electrical shaver further comprising a grip portion, said portion being arranged to comprise a further electrode conceived to provide a reference signal.

18. (Cancelled)

19. (Previously presented) The health management system according to claim 12, wherein said device is a telephone handset, the first contact surface comprising a housing area of the telephone handset, said area being arranged in a direct vicinity of an earpiece, the second contact surface comprising a grip portion of the telephone handset.

20. (Previously presented) The health management system according to claim 19, wherein said telephone handset is a mobile telephone handset, the first contact surface comprising a keypad, the second contact surface comprising a grip portion of the mobile telephone handset.

21. (New) The device according to claim 2, further including a differential amplifier wherein the electrical differential signal is input to prior to being input to the sensor signal interpretation.

22. (New) The health management system according to claim 12, further including a differential amplifier wherein the electrical differential signal is input to prior to being input to the sensor signal interpretation.

23. (New) A method, comprising:

measuring with a measuring component an electrical differential signal in an ECG spectrum generated by cardiac activity of an individual during usage of a portable electronic device, said electrical differential signal being measured from a first contact surface contacting a first skin surface of the individual and a second contact surface contacting a second skin surface on a part of the body of the individual below a shoulder line of the individual, the first contact surface comprising a first electrode and the second contact surface comprising a second electrode, said first electrode being electrically isolated from said second electrode during usage of said device, said signal being representative of a physiological condition of said individual;

amplifying the signal with a differential amplifier;

filtering the signal with a filter;

digitizing the signal with an analog to digital converter; and

analyzing the signal with a sensor signal interpretation unit in order to derive a health-related parameter related to the cardiac activity.